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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rolf Kawa

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FOX ROTHSCHILD LLP
1101 MARKET STREET
PHILADELPHIA, PA 19107

EXAMINER

SULLIVAN, DANIELLE D

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,633	Applicant(s) KAWA ET AL.	
	Examiner DANIELLE SULLIVAN	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-25 and 27-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-25 and 27-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 21-25, 27-38 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polovsky et al. (5,384,334) in view of Ansmann et al. (US 6,280,712).

Applicant's Invention

Applicant claims a protection water-in-oil emulsion comprising: a) at least on polyol poly-12-hydrostearate, particularly comprising poly(12-hydroxystearic acid) polyglycerol ester (preferably 2-10%); b) an oil component, particularly dialkyl carbonate (preferably 1-20%); c) at least on surfactant selected from anionic, zwitterionic or mixtures thereof, particularly a mixture of Cocamidopropylbetaine and a sulfosuccinate (preferably 0.5-10%); of a UV protection factor (preferably 0.5-20%); and water (preferably 30-80%).

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Polovsky et al. teach stable personal care compositions comprising alkoxyated alkyl glucosides that may be formulated as water-in-oil emulsions have mild effects to skin and hair (abstract; column 7, lines 41-47). Additives include sulfosuccinates, cocamidopropyl betaine and sunscreens (column 7, line 60; column 8, lines 10 and 44-49). The alkyl glucoside, MG10HDAC1, is present in the amount of 2.5% the composition (column 9, line 65; Example 5).

**Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)**

Polovsky et al. do not teach the polyol poly-12-hydroxystearate or the specific oil component, dialkyl carbonate. Neither are specific ranges of percent weight given. It is for this reason that Ansmann et al. is joined.

Ansmann et al. teach a process for enhancing the effectiveness of a sunscreens UV filters by using dialkyl ethers (abstract, column 1, lines 37-46). The dialkyl carbonates may be used in a quantity of 1-30% by weight (column 2, lines 11-14). The compositions may contain mild surfactants, e.g., dialkylsulfosuccinates and cocamidopropyl betaine (column 4, line 15; column 5, line 55), oil components, emulsifiers, such as polyol esters of poly-12-hydroxystearate and alkyl glucosides (column 4, lines 59-62; column 5, line 3) and super-fatting agents to stabilize foams (column 4, lines 5-12; column 6, lines 8 and 12). The alkyl glucosides are taught as equivalents of polyglycerol poly-12-hydroxystearates which may be used in combination. The total percentage of additives may be from 1 to 50% by weight, based

Art Unit: 1616

on the particular formulation. Water is added to bring the composition to 100 (Table 2, line 64).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Polovsky et al. and Ansmann et al. to further include poly-12-hydroxystearate. One would have been motivated to include poly-12-hydroxystearate because it is a known cosmetic emulsifier and is taught as a functional equivalent of alkyl glucosides taught by Ansmann et al. Therefore, a skilled artisan would have been motivated to add poly-12-hydroxystearate to have the added benefit of a mild effect to skin as taught by Polovsky et al.

Regarding claim 38, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Polovsky et al. and Ansmann et al. to further include dialkyl carbonates as the oil component. One would have been motivated to include dialkyl carbonates because they enhance the effectiveness of sunscreens as taught by Ansmann et al. It is prima facie obvious to utilize any known emulsifier and oil component absent any showing of unexpectedness.

Polovsky et al. does not disclose any particular ranges of poly-12-hydroxystearate but discloses the equivalent, alkyl glucoside, as present in 2% the composition. Ansmann et al. teaches dialkyl carbonates may be used in a quantity of 1-30% by weight the composition with a total percentage of additives from 1 to 50% by

Art Unit: 1616

weight with water added to bring the composition to 100. The particular additives include poly-12-hydroxystearates and surfactants.

It would have been obvious to a skilled artisan to manipulate the concentrations within the given ranges provided in the prior art. One would have been motivated to optimize the concentration through routine experimentation to find the optimal workable range.

Claims 21-25 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polovsky et al. (5,384,334) in view of Ansmann et al. (US 6,280,712) in further view of Van der Heijden et al. (WO 00/78629).

Applicant's Invention

Applicant claims a protection water-in-oil emulsion as address in above 103 rejection. Applicant also claims a system of using the composition in a foam dispenser. The dispenser disposes the emulsion with a compressed gas by a pump mechanism combining the emulsion with air to form and dispense foam. The air to liquid mixing ratio is from 5:1 to 30:1 and the shot volume is from 0.1 to 1 ml liquid per shot.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Polovsky et al. and Ansmann et al. teach a foamable composition as set forth in the above 103 rejection.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Polovsky et al. and Ansmann et al. do not teach as specific foam mechanism. It is for this reason that Van der Heijden et al. is added.

Van der Heijden et al. teach the foam dispenser disclosed as applicable in the invention (see specification page 27, lines 14-17). The dispenser is taught as applicable for dispensing cosmetics (page 1, lines 19-29). It is advantageous since it is taught to make it virtually impossible for water to enter the dispensing assembly from outside the aerosol (page 3, lines 18-20).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Polovsky et al., Ansmann et al. and Van der Heijden et al. and further include a system of dispensing the foam. One would have been motivated to use the foam dispenser taught by Van der Heijden et al. to provide a pumpable formulation to allow for the ease in application by pumping the formulation. Further, the foam dispenser, as taught by Van der Heijden et al., protects the ingredients in the water-in-oil emulsion from contamination.

Response to Arguments

Applicant's arguments have been fully considered and are not persuasive. First, Applicant's argue that although the emulsifiers cited by Ansmann et al. may be selected from alkyl glucosides and polyglycerol poly-12-hydroxystearate, they are not equivalent

Art Unit: 1616

because only compositions comprising poly-12-hydroxystearate produce a foamable composition. While the examiner agrees that alkyl glucosides and polyglycerol poly-12-hydroxystearate are not classified as equivalent, the fact that both are known emulsifiers shows that one of ordinary skill can easily substitute one for the other and arrive at the present invention. It should be noted that both Ansmann et al. and Polovsky et al. teach personal care compositions comprising sunscreens and oils, hence the combination of references is proper. Therefore, one of ordinary skill in the art would have been motivated to combine polyglycerol poly-12-hydroxystearate as an emulsifier for use in personal care compositions

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616